

#### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan Governor

Lori F. Kaplan Commissioner

March 2, 2004

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Memorial Hospital & Health Care Center / MSOP037-17778-00113

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

#### Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, within eighteen (18) calendar days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- the date of the postmark on the envelope containing the document, if the document is mailed to (2) OEA by U.S. mail; or
- The date on which the document is deposited with a private carrier, as shown by receipt issued by (3)the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2)the interest of the person making the request;
- (3)identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- the issues, with particularity, proposed for considerations at any hearing; and (5)
- identification of the terms and conditions which, in the judgment of the person making the request. (6)would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures FNPER.dot 9/16/03





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Lori F. Kaplan Commissioner 100 North Senate Avenue
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Indianapolis, Indiana 46206-6015
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# MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

#### Memorial Hospital & Health Care Center 800 West 9<sup>th</sup> Street Jasper, Indiana 47546

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 037-17778-00113	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:March 2, 2004 Expiration Date:March 2, 2009

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Memorial Hospital & Health Care Center MSOP037-17778-00113 Jasper, Indiana

Permit Reviewer: Linda Quigley/EVP

#### **SECTION A**

#### SOURCE SUMMARY

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This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary health care facility.

Authorized Individual: Vice President of Finance

800 West 9th Street, Jasper, Indiana 47546 Source Address: 800 West 9th Street, Jasper, Indiana 47546 Mailing Address:

General Source Phone: (812)482-0391

SIC Code: 8062 County Location: Dubois

Source Location Status: Attainment for all criteria pollutants Source Status: Minor Source Operating Permit

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- One (1) natural gas fired boiler, identified as 2, constructed in 1970, with a maximum heat (a) input rate of 12.6 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as S1;
- Two (2) natural gas fired boilers, each using No. 2 fuel oil as backup, identified as 3 and 4, (b) each constructed in 1992, with maximum heat input rates of 12.6 MMBtu per hour, and 8.4 MMBtu per hour, respectively, and exhausting to one (1) stack, identified as S1;
- One (1) natural gas fired boiler, using No. 2 fuel oil as backup, identified as 1, constructed (c) in 2003, with a maximum heat input rate of 20.9 MMBtu per hour, and exhausting to one (1) stack, identified as S2;
- One (1) 536 horsepower, diesel fuel fired emergency generator, identified as G-5, and two (d) (2) 900 horsepower, diesel fuel fired emergency generators, identified as G-6 and G-7.

#### SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

#### B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

#### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

#### B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

#### B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

#### B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management

100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

#### B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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#### B.8 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

### B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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#### B.10 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### B.11 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

C.1 Particulate Emission Limitations For Processes With Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

#### C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 1410-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are
applicable for any removal or disturbance of RACM greater than three (3) linear feet on
pipes or three (3) square feet on any other facility components or a total of at least 0.75
cubic feet on all facility components.

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- (f) Demolition and renovation

  The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

#### **Testing Requirements**

#### C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

#### **Compliance Monitoring Requirements**

#### C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### C.9 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

#### C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (a) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **Record Keeping and Reporting Requirements**

#### C.11 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

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- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### C.12 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

#### C.13 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### **Facility Description:**

- (a) One (1) natural gas fired boiler, identified as 2, constructed in 1970, with a maximum heat input rate of 12.6 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as S1;
- (b) Two (2) natural gas fired boilers, each using No. 2 fuel oil as backup, identified as 3 and 4, each constructed in 1992, with maximum heat input rates of 12.6 MMBtu per hour, and 8.4 MMBtu per hour, respectively, and exhausting to one (1) stack, identified as S1;
- (c) One (1) natural gas fired boiler, using No. 2 fuel oil as backup, identified as 1, constructed in 2003, with a maximum heat input rate of 20.9 MMBtu per hour, and exhausting to one (1) stack, identified as S2;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3] [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-3 (d) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(b)), particulate emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 pounds of particulate matter per million British thermal units heat input. Therefore PM emissions from the one (1) 12.6 MMBtu/hr boiler (identified as 2) shall be limited to 0.8 lb/MMBtu heat input.
- (b) Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), PM emissions from the one (1) 12.6 MMBtu/hr boilers (identified as 3) and the one (1) 8.4 MMBtu/hr boiler (identified as 4) shall be limited to 0.44 lb/MMBtu heat input and the one (1) 20.9 MMBtu/hr boiler (identified as 1) shall be limited to 0.39 lb/MMBtu heat input based on the following formula:

$$Pt = 1.09$$
 $Q^{0.26}$ 

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input <math>Q = Total source maximum operating capacity rating in MMBtu/hr heat input.

#### D.1.2 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the one (1) 20.9 MMBtu per hour boiler, identified as 1, and the one (1) 12.6 MMBtu per hour boiler, identified as 3, except when otherwise specified in 40 CFR Part 60, Subpart Dc.

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1][40 CFR 60, Subpart Dc]

- (a) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), sulfur dioxide emissions from the one (1) 20.9 MMBtu/hr boiler (identified as 1), and the one (1) 12.6 MMBtu/hr boiler (identified as 3), shall be limited to 0.5 pounds per million Btu heat input when combusting No. 2 fuel oil. This is equivalent to a maximum fuel oil sulfur content of 0.5% when combusting No. 2 fuel oil.
- (c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

Pursuant to 40 CFR 60 Subpart Dc and 326 IAC 7-1.1-2, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

#### **Compliance Determination Requirements**

#### D.1.4 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Condition D.1.3 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
  - Providing vendor analysis of fuel delivered, if accompanied by a vendor certification;
     or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

#### D.1.5 Testing Requirements [40 CFR 60.8][326 IAC 2-1.1-11]

In order to demonstrate compliance with the SO2 limit in Condition D.1.3, and pursuant to 40 CFR 60.8 (Performance Tests), within 60 days after achieving the maximum production rate at which the 20.9 MMBtu per hour boiler, identified as 1, and the 12.6 MMBtu per hour boiler, identified as 3, will be operated, but not later than 180 days after initial startup of such facilities, the owner or operator of such facilities shall conduct a performance test on each affected facility and furnish the Administrator a written report of the results of such performance tests.

- (a) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained Subpart Dc unless the Administrator:
  - (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
  - (2) approves the use of an equivalent method;

- approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
- (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facilities are in compliance with the standard; or
- (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

- (b) The Permittee may submit a request to the Administrator to waive the testing requirement and demonstrate compliance with the applicable limitations using one of the following options:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

#### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.1.6 Visible Emissions Notations

- (a) Visible emission notations of the boilers, identified as 1, 2, 3 and 4, stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation and Implementation shall be considered a deviation from this permit.

#### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.1.7 Record Keeping Requirements

(a) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall maintain records in accordance with (1) through (5) below. Note that pursuant to 40 CFR 60

Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.

- (1) Calendar dates covered in the compliance determination period;
- (2) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (3) Fuel supplier certifications;
- (4) The name of the fuel supplier; and
- (5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the boilers, identified as 1, 2, 3 and 4, stack exhaust once per shift.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.8 Reporting Requirements

The semi-annual natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **SECTION D.2**

#### **FACILITY OPERATION CONDITIONS**

#### **Facility Description:**

(d) One (1) 536 horsepower, diesel fuel fired emergency generator, identified as G-5, and two (2) 900 horsepower, diesel fuel fired emergency generators, identified as G-6 and G-7.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.2.1 Limitation of Operating Hours

Operation of each emergency generator shall in no case exceed 500 hours of operation per twelve (12) consecutive month period. Any changes to the source that would require operating any of the emergency generators for more than 500 hours per year shall require prior approval from IDEM, OAQ.

#### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.2.2 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records of the dates of operation and the number of hours of operation for each generator.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

## MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Memorial Hospital & Health Care Center
Address:	800 West 9 <sup>th</sup> Street
City:	Jasper, Indiana 47546
Phone #:	(812) 482-0391
MSOP #:	037-17778-00113
hereby certify that Me	emorial Hospital & Health Care Center is ? still in operation. ? no longer in operation.
hereby certify that Me	emorial Hospital & Health Care Center is ? in compliance with the requirements of MSOP 037-17778-00113. ? not in compliance with the requirements of MSOP 037-17778-00113.
Authorized Individu	al (typed):
Title:	
Signature:	
Date:	
	ons or requirements for which the source is not in compliance, provide a narrative source did or will achieve compliance and the date compliance was, or will be
Noncompliance:	

#### **MALFUNCTION REPORT**

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.
THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER?, 25 TONS/YEAR SULFUR DIOXIDE?, 25 TONS/YEAR NITROGEN OXIDES?, 25 TONS/YEAR VOC?, 25 TONS/YEAR HYDROGEN SULFIDE?, 25 TONS/YEAR TOTAL REDUCED SULFUR ?, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS?, 25 TONS/YEAR FLUORIDES?, 100TONS/YEAR CARBON MONOXIDE?, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT?, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT?, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD?, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION
THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC OR, PERMIT CONDITION # AND/OR PERMIT LIMIT OF
THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y
COMPANY: Memorial Hospital & Health Care Center LOCATION: 800 West 9 <sup>th</sup> Street, Jasper, Indiana Dubois County  PERMIT NO. MSOP037-17778-00113 AFS PLANT ID: 037-00113 AFS POINT ID: INSP: Gene Kelso CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:
DATE/TIME MALFUNCTION STARTED:// 19 AM / PM ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE// 19 AM/PM
TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION:
MEASURES TAKEN TO MINIMIZE EMISSIONS:
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:
CONTINUED OPERATION REQUIRED TO PROVIDE <u>ESSENTIAL</u> * SERVICES:
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:  CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:  INTERIM CONTROL MEASURES: (IF APPLICABLE)

Memorial Hospital & Health Care Center Jasper, Indiana

Permit Reviewer: Linda Quigley/EVP

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MALFUNCTION REPORTED BY:(SIGI		TLE:	
(SIGI	NATURE IF FAXED)		
MALFUNCTION RECORDED BY:	DATE:	TIME:	
*SEE PAGE 2			
applicable	PAGE 1 OF 2 orm should only be u to Rule 326 IAC 1-6 exemption under 326	• •	
326 IAC 1-6-1 Applicability of rule			
Sec. 1. This rule applies to the under 326 IAC 2-5.1 or 326 IAC 2-6.		of any facility required to obtain a peri	mit
326 IAC 1-2-39 "Malfunction" def	inition		
Sec. 39. Any sudden, unavocombustion or process equipment to		ir pollution control equipment, proces and usual manner.	ss, or
	solely for the economic	ations, such as, the providing of elect ic benefit of the owner or operator sh ring a control equipment shutdown.	
If this item is checked on the front, p	lease explain rationale	e:	

Memorial Hospital & Health Care Center Jasper, Indiana

Permit Reviewer: Linda Quigley/EVP

Date:

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Memorial Hospital & Health Care Center 800 West 9<sup>nd</sup> Street, Jasper, Indiana 47546 Source Address: 800 West 9<sup>nd</sup> Street, Jasper, Indiana 47546 Mailing Address: MSOP037-177778-00113 MSOP No.: This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. Report period Beginning: \_\_\_ Ending: Boiler Affected Alternate Fuel Days burning alternate fuel <u>From</u> <u>To</u> I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature: Printed Name: Title/Position:

## Indiana Department of Environmental Management Office of Air Quality

#### Addendum to the

Technical Support Document for Minor Source Operating Permit (MSOP)

Source Name: Memorial Hospital and Health Care Center Source Location: 800 West 9<sup>th</sup> Street, Jasper, Indiana 47546

County: Dubois SIC Code: 8062

Operation Permit No.: 037-17778-00113
Permit Reviewer: Linda Quigley/EVP

On January 13, 2004, the Office of Air Quality (OAQ) had a notice published in The Herald, Jasper, Indiana, stating that Memorial Hospital and Health Care Center had applied for a Minor Source Operating Permit (MSOP) to relating to the operation of boilers and emergency generators at a health care facility. The notice also stated that the OAQ proposed to issue a MSOP for this operation and provided information on how the public could review the proposed MSOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this MSOP should be issued as proposed.

Upon further review, the Office of Air Quality (OAQ) has decided to make the following changes (bolded language has been added, language with a line through it has been stricken):

(1) Section C.2 - The word "to" has been added to the first sentence.

#### C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit **to** operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

(2) Section D.1.5 - This condition was clarified to state that testing is required for SO2 emissions.

#### D.1.5 Testing Requirements [40 CFR 60.8][326 IAC 2-1.1-11]

In order to demonstrate compliance with the SO2 limit in Condition D.1.3, and p—Pursuant to 40 CFR 60.8 (Performance Tests), within 60 days after achieving the maximum production rate at which the 20.9 MMBtu per hour boiler, identified as 1, and the 12.6 MMBtu per hour boiler, identified as 3, will be operated, but not later than 180 days after initial startup of such facilities, the owner or operator of such facilities shall conduct a performance test on each affected facility and furnish the Administrator a written report of the results of such performance tests.

- (a) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained Subpart Dc unless the Administrator:
  - (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
  - (2) approves the use of an equivalent method;
  - approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
  - (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facilities are in compliance with the standard; or
  - (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

- (b) The Permittee may submit a request to the Administrator to waive the testing requirement and demonstrate compliance with the applicable limitations using one of the following options:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (3) Condition B.9 [IC 13-17-3-2] was added to the rule sites in the title. This change was also included in the Table of Contents.
- B.9 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

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such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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- (4) Condition C.1 Reference to 40 CFR 52 Subpart P has been stricken from the title. This change was also included in the Table of Contents.
- C.1 Particulate Emission Limitations For Processes With Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

## Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit

#### **Source Background and Description**

Source Name: Memorial Hospital and Health Care Center Source Location: 800 West 9<sup>th</sup> Street, Jasper, Indiana 47546

County: Dubois SIC Code: 8062

Operation Permit No.: 037-17778-00113
Permit Reviewer: Linda Quigley/EVP

The Office of Air Quality (OAQ) has reviewed an application from Memorial Hospital and Health Care Center relating to the operation of boilers and emergency generators at a health care facility.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source consists of the following unpermitted facilities/units:

- (a) One (1) natural gas fired boiler, identified as 2, constructed in 1970, with a maximum heat input rate of 12.6 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as S1;
- (b) Two (2) natural gas fired boilers, each using No. 2 fuel oil as backup, identified as 3 and 4, each constructed in 1992, with maximum heat input rates of 12.6 MMBtu per hour, and 8.4 MMBtu per hour, respectively, and exhausting to one (1) stack, identified as S1;
- (c) One (1) natural gas fired boiler, using No. 2 fuel oil as backup, identified as 1, constructed in 2003, with a maximum heat input rate of 20.9 MMBtu per hour, and exhausting to one (1) stack, identified as S2;
- (d) One (1) 536 horsepower, diesel fuel fired emergency generator, identified as G-5, and two (2) 900 horsepower, diesel fuel fired emergency generators, identified as G-6 and G-7.

#### **Existing Approvals**

This source does not have any existing approvals.

#### **Enforcement Issue**

(a) IDEM is aware that equipment has been constructed prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.

Page 2 of 7 MSOP037-17778-00113 (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

#### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 1, 2003, with additional information received on November 19, 2003.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations, pages 1 through 6.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	3.13
PM-10	3.45
SO <sub>2</sub>	93.47
VOC	1.45
CO	23.27
NO <sub>x</sub>	45.76

HAP's	Potential To Emit (tons/year)
hexane	less than 10
selenium	less than 10
TOTAL	less than 25

Note: See Appendix A for complete listing of HAPs.

The potential to emit (as defined in 326 IAC 2-7-1(29)) of  $SO_2$  and  $NO_X$  are greater than twenty-five (25) tons per year. Therefore, pursuant to 326 IAC 2-5.1-3, Section (a)(1), and 326 IAC 2-6.1-2, a construction and operating permit is required.

#### **County Attainment Status**

The source is located in Dubois County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment

СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Dubois County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Source Status**

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	3.13
PM10	3.45
SO <sub>2</sub>	93.47
VOC	1.45
CO	23.27
NO <sub>x</sub>	45.76
Single HAP	0.330
Combination HAPs	0.346

This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

#### Federal Rule Applicability

(a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the one (1) 20.9 MMBtu per hour boiler, identified as 1, and the one (1) 12.6 MMBtu per hour boiler, identified as 3, except when otherwise specified in 40 CFR Part 60, Subpart Dc.

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- (b) The one (1) 20.9 MMBtu per hour boiler, identified as 1, and the one (1) 12.6 MMBtu per hour boiler, identified as 3, are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) because the boilers were constructed in 2003 and 1992, respectively, which is after the rule applicability date of June 1989, and each of the boilers is rated at less than one hundred (100) MMBtu, but greater than ten (10) MMBtu per hour. As such, the following shall apply:
  - (1) The SO<sub>2</sub> emissions from the 20.9 MMBtu per hour boiler and the 12.6 MMBtu per hour boiler shall not exceed five tenths (0.5) pounds per million Btu heat input when burning fuel oil; or
  - (2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]
- (c) The one (1)12.6 MMBtu per hour boiler, identified as 2, is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because it was constructed prior to June 9, 1989.
- (d) The one (1) 8.4 MMBtu per hour boiler, identified as 4, is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because the boiler is rated at less than ten (10) MMBtu per hour.
- (e) The one (1) 20.9 MMBtu per hour boiler, the two (2) 12.6 MMBtu per hour boilers, and the one (1) 8.4 MMBtu per hour boiler, identified as 1, 2, 3, and 4, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c), Subpart D, Da or Db, because each boiler is rated at less than one hundred (100) MMBtu per hour.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

## State Rule Applicability - Entire Source

## 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not subject to this rule because potential uncontrolled emissions of all criteria pollutants are less than 250 tons per year. This source is also not one of the 28 listed source categories. Therefore, this source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

## 326 IAC 2-6 (Emission Reporting)

This source is located in Dubois County and the potential to emit of all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

## 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (Major Sources of Hazardous Air Pollutants (HAP))

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). There are no facilities at this source that emit greater than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs, respectively. Therefore, 326 IAC 2-4.1-1 does not apply.

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

(a) Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which began operation on or before June 8, 1972, shall in no case exceed 0.8 lb/MMBtu heat input.

The limitation based on the following equation is higher than 0.8 lbs PM/MMBtu:

$$Pt = (C*a*h)/(76.5*Q^{0.75*}N^{0.25})$$

Where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input C = maximum ground level concentration (50?g/m3, for a period not to exceed 60 min.)

Q = total source max. indirect heater input = 12.6 (Boiler I.D. No. 2)

N = number of stacks in the fuel burning operation = 1

a = plume rise factor (0.67, for Q < 1,000)

h = average stack height in feet = 88 feet

(Boiler I.D. No. 2)  $Pt = (50*0.67*88)/(76.5*12.6^{0.75*}1^{0.25}) = 5.76 \text{ lbs PM/MMBtu} > 0.8$  Ib PM/MMBtu

Therefore, PM emissions from Boiler I.D. No. 2 shall be limited to 0.8 lb PM/MMBtu

Based on Appendix A, the total potential to emit of PM from the one (1) boiler, identified as 2, constructed in 1970, is 0.10 tons per year.

0.10 tons/yr x (2000 lbs/ton/8760 hrs/yr) = 0.023 lbs/hr (0.023 lbs/hr / 12.6 MMBtu/hr) = 0.002 lbs PM per MMBtu Therefore, the one (1) boiler, identified as 2, will comply with this rule.

(b) Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units constructed after September 21, 1983 shall be limited using the following equation:

$$Pt = 1.09$$
 $Q^{0.26}$ 

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in MMBtu/hr heat input.

For 3, 4 (both constructed in 1992) Q = 33.6 = 12.6 + 8.4 + 12.6For 1 (constructed in 2003) Q = 54.5 = 21.0 + 20.9 + 12.6

(3, 4) Pt =  $(1.09/33.6^{0.26})$  = 0.44 lbs PM/MMBtu (1) Pt =  $(1.09/54.5^{0.26})$  = 0.39 lbs PM/MMBtu

Based on Appendix A, the potential to emit of PM from the three (3) boilers identified as 3,

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4, and 1, all constructed after September 21, 1983, is 2.62 tons per year.

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For 3 and 4 1.31 tons/yr  $\times$  (2000 lbs/ton / 8760 hrs/yr) = 0.30 lbs/hr, each

(0.30 lbs/hr / 21.0 MMBtu/hr) = 0.014 lbs PM per MMBtu, each

For 1 1.31 tons/yr x (2000 lbs/ton / 8760 hrs/yr) = 0.30 lbs/hr

(0.30 lbs/hr / 20.9 MMBtu/hr) = 0.014 lbs PM per MMBtu

Therefore, the three (3) boilers, identified as 3, 4, and 1 will comply with this rule.

## 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

As facilities with a potential to emit (PTE) of sulfur dioxide ( $SO_2$ ) at or greater than 25 tons per year, the two (2) natural gas-fired boilers using no. 2 fuel oil as back-up fuel, identified as 1 and 3, are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations). Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from the two (2) boilers using No. 2 fuel oil shall be limited to 0.5 pounds per million BTU heat input when using No. 2 fuel oil. This equates to a fuel oil sulfur content limit of 0.5% (see calculations on page 4 of 6, Appendix A). The source shall use natural gas or No. 2 fuel oil with a maximum sulfur content of 0.5% to be in compliance with 326 IAC 7-1.1.

## 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

This source is subject to 326 IAC 7-1 for the two (2) natural gas-fired boilers using No. 2 fuel oil as back-up fuel, identified as 1 and 3. As such, and pursuant to 326 IAC 7-2 (Compliance), the source shall demonstrate compliance with the 326 IAC 7-1  $SO_2$  emission limitation by recording, and submitting to the OAQ upon request, the information as specified, including fuel sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average.

## State Rule Applicability - Emergency Generators

For the emergency generators, the potential to emit air pollutants was calculated at a maximum of 500 operating hours per year for each unit. As a result, the following condition was added to the permit to make the limit on the number of operating hours enforceable.

Operation of each emergency generator shall in no case exceed 500 hours of operation per twelve (12) consecutive month period. Any changes to the source that would require operating any of the emergency generators for more than 500 hours per year shall require prior approval from IDEM, OAQ.

## **Testing Requirements**

- (a) Testing is not required for the one (1) 12 MMBtu per hour boiler, identified as 2, and the one (1) 8.4 MMBtu per hour boiler, identified as 4, because there are no control devices and emissions were based on AP-42 emission factors.
- (b) Pursuant to 40 CFR 60.8 (Performance Tests), within 60 days after achieving the maximum production rate at which the 20.9 MMBtu per hour boiler, identified as 1, and the 12.6 MMBtu per hour boiler, identified as 3, will be operated, but not later than 180 days after initial startup of such facilities, the owner or operator of such facilities shall conduct a performance test on each affected facility and furnish the Administrator a written report of the results of such performance tests.
  - (A) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained Subpart Dc unless the Administrator:
    - (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
    - (2) approves the use of an equivalent method;

(3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;

- (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facilities are in compliance with the standard; or
- (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

- (B) The Permittee may submit a request to the Administrator to waive the testing requirement and demonstrate compliance with the applicable limitations using one of the following options:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

## Conclusion

The operation of boilers and emergency generators at this health care facility shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 037-17778-00113.** 

## **Appendix A: Emission Calculations**

Company Name: Memorial Hospital & Health Care Center Address, City IN Zip: 800 West 9th Street, Jasper, Indiana 47546

MSOP: 037-17778-00113 Plt ID: 037-00113

Reviewer: Linda Quigley/EVP Application Rec.: August 1, 2003

## **Uncontrolled Potential Emissions (tons/year)**

		Emissions Gene	erating Activity		
Pollutant	Boiler #2	Boilers #1, #3 and #4	Boilers #1, #3 and #4	Emergency Generators	Worst Case Senerio
	Natural Gas Combustion Only	Natural Gas Combustion	No. 2 Fuel Oil Combustion	No. 2 Fuel Oil Combustion	TOTAL
PM	0.10	0.35	2.62	0.41	3.1:
PM10	0.42	1.39	2.62	0.41	3.4
SO2	0.03	0.11	91.21	2.23	93.4
NOx	5.52	18.35	26.22	14.02	45.7
VOC	0.03	1.01	0.45	0.41	1.4
CO	4.64	15.42	0.55	3.21	23.2
total HAPs	negl.	3.46E-01	4.49E-03	negl.	3.46E-0
worst case single HAP	negl.	3.30E-01	1.37E-03	negl.	3.30E-0
					hexan

## **Controlled Potential Emissions (tons/year)**

	Emissions Generating Activity								
Pollutant	Boiler #2	Boiler #2 Boilers #1, #3 and #4		Emergency Generators	Worst Case Senerio				
	Natural Gas Combustion Only	Natural Gas Combustion	No. 2 Fuel Oil Combustion	No. 2 Fuel Oil Combustion	TOTAL				
PM	0.10	0.35	2.62	0.41	3.13				
PM10	0.42	1.39	2.62	0.41	3.45				
SO2	0.03	0.11	91.21	2.23	93.47				
NOx	5.52	18.35	26.22	14.02	45.76				
VOC	0.03	1.01	0.45	0.41	1.45				
CO	4.64	15.42	0.55	3.21	23.27				
total HAPs	negl.	3.46E-01	4.49E-03	negl.	3.46E-01				
worst case single HAP	negl.	3.30E-01	1.37E-03	negl.	3.30E-01				
					hexane				
Total emissions based on ra	otal emissions based on rated capacity at 8,760 hours/year, after control.								

## Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Memorial Hospital & Health Care Center

Address, City IN Zip: 800 West 9th Street, Jasper, Indiana 47546

MSOP: 037-17778-00113

Plt ID: 037-00113

Reviewer: Linda Quigley/EVP Application Rec.: August 1, 2003

Heat Input Capacity MMBtu/hr

54.5

Potential Throughput MMCF/yr

Boiler I.D.

20.9
1
12.6
2
12.6
3
8.4
4

Total

477.4

## **Pollutant**

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.45	1.81	0.14	23.87	1.31	20.05

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

## Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 3 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler HAPs Emissions

Company Name: Memorial Hospital & Health Care Center Address, City IN Zip: 800 West 9th Street, Jasper, Indiana 47546

MSOP: 037-17778-00113

Plt ID: 037-00113

Reviewer: Linda Quigley/EVP

Application Rec.: August 1, 2003

## HAPs - Organics

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.013E-04	2.865E-04	1.790E-02	4.297E-01	8.116E-04

## HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.194E-04	2.626E-04	3.342E-04	9.071E-05	5.013E-04

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

## **Appendix A: Emissions Calculations** Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) #1 and #2 Fuel Oil

Company Name: Memorial Hospital & Health Care Center Address, City IN Zip: 800 West 9th Street, Jasper, Indiana 47546

MSOP: 037-17778-00113

Plt ID: 037-00113

Reviewer: Linda Quigley/EVP

Application Rec.: August 1, 2003

**Heat Input Capacity** MMBtu/hr

20.9

12.6 8.4

41.9

Potential Throughput

S = Weight % Sulfur

kgals/year

2621.742857

0.49

Boiler I.D. 1 3

4 Total

		Pollutant						
	PM*	SO2	NOx	VOC	CO			
Emission Factor in lb/kgal	2.0	69.58	20.0	0.34	5.0			
		(142.0S)						
Potential Emission in tons/yr	2.62	91.21	26.22	0.45	6.55			

## Methodology

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

## Compliance with 326 IAC 7-1.1-2

The following calculations determine the maximum sulfur content of #2 distillate fuel allowed by 326 IAC 7-1-.1-2:

0.5 lb/MMBt	140	0,000	Btu/gal =	70	lb/1000 gal
70 lb/1000	142		lb/1000 gal =	0.5	%
Sulfur content must be less than or	equal to	0.5	% to comply w	ith 326 IAC 7-	1.1-2.

Facility will comply with 326 IAC 7-1.1-2 by using fuel oil with a limited 0.50% sulfur content.

See page 5 for HAPs emission calculations.

<sup>1</sup> gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

<sup>\*</sup>PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

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## Appendix A: Emissions Calculations Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) #1 and #2 Fuel Oil HAPs Emissions

Company Name: Memorial Hospital & Health Care Center Address, City IN Zip: 800 West 9th Street, Jasper, Indiana 47546

MSOP: 037-17778-00113

Plt ID: 037-00113

Reviewer: Linda Quigley/EVP Application Rec.: August 1, 2003

## HAPs - Metals

	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	3.66E-04	2.75E-04	2.75E-04	2.75E-04	8.24E-04

## HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury	Manganese	Nickel	Selenium
	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	2.75E-04	5.49E-04	2.75E-04	1.37E-03

## Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

## Appendix A: Emission Calculations **Internal Combustion Engines - Diesel Fuel Emergency Generator (>600 HP)**

Company Name: Memorial Hospital & Health Care Center Address, City IN Zip: 800 West 9th Street, Jasper, Indiana 47546

MSOP: 037-17778-00113

Plt ID: 037-00113

Reviewer: Linda Quigley/EVP Application Rec.: August 1, 2003

## Emissions calculated based on output rating (hp)

Potential Throughput **Power Output** 

Horsepower (hp) hp-hr/yr

S= 0.49	= WEIGHT % SULFUR
---------	-------------------

2336.0	1168000.0		
Facilities	HP		
Generator (5)	536		
Generator (6)	900		

Generator (7) 900 Total 2336

	Pollutant						
	PM*	PM10*	SO2	NOx	VOC	СО	
Emission Factor in lb/hp-hr	0.0007		0.0040	0.024	0.00071	0.00550	
		not provided	(.00809S)	**see below			
Potential Emission in tons/yr	0.41	0.00	2.32	14.02	0.41	3.21	

<sup>\*\*</sup>NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr Note that the PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of AP-42.

### Methodology

Potential Throughput (hp-hr/yr) = hp \* 500 hr/yr

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1.

Emission (tons/yr) = [Potential Throughput (hp-/hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

PTE was calculated using 500 hours per year for emergency generator.

<sup>\*</sup> No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included.